

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Prairie Dog Creek Stream Restoration Project
<b>Proposed Implementation Date:</b>	2019-2021
<b>Proponent:</b>	Heal Holdings LLC/Diamond Cross Ranch
<b>Location:</b>	<u>T6S-R41E-Sec 16</u>
<b>County:</b>	Rosebud

### I. TYPE AND PURPOSE OF ACTION

The Lessee of the state-owned trust lands parcel has proposed a stream restoration project along Prairie Dog Creek in southern Rosebud County MT a tributary to the Tongue River. The proposed project on state trust lands is a part of a larger project on the proponents deeded lands and is proposed to be completed in two phases. The proposal on state owned trust land includes the construction of numerous small earthen diversions within the ephemeral stream channel of Prairie Dog Creek in an attempt to mimic historic beaver activity in order to limit erosion and down cutting within the stream channel and to raise the water table within the overall drainage feature.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

Due to the limited nature of the proposed action and the fact that it is a lessee proposed project with potential environmental benefits no scoping was conducted.

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

USACE 404 permit

#### 3. ALTERNATIVES CONSIDERED:

Alternative A- No action, under this alternative there would be no change to the existing stream channel. Continued downward movement, head cutting, and erosion of the existing stream channel would continue.

Alternative B- Under this alternative, a number of small earthen structures would be constructed within the existing stream channel. These structures along with those created upstream and downstream of the state-owned parcel are intended to decrease the velocity of precipitation runoff and increase sedimentation behind each structure with the desired intent to, over time, raise the entire stream channel to a much shallower depth. This shallower stream channel is expected to better disperse precipitation runoff to decrease or eliminate the downward movement and head cutting of the stream channel and eventually raise the overall water table within the Prairie Dog Creek drainage which will in turn increase desirable vegetation within the drainage. The project is scheduled to take place in 2 phases starting in the upstream reaches of the drainage with the placement of approximately 10 small structures on the state land in phase 1. Each of these structures will have vegetation established post construction. Phase 1 will be monitored for demonstrated success and/or necessary modifications prior to the commencement of construction of Phase 2 structures (approximately 11 on state land).

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain *POTENTIAL IMPACTS AND MITIGATIONS* following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

Soils along this stretch of Prairie Dog Creek are generally silts and sands typical of these types of overflow sites.

Alternative A- No change to the existing soil types or conditions. Continued erosion, downward movement and head cutting within the existing channel would be expected.

Alternative B- Temporary soil disturbance would be expected with the construction of each earthen structure. Over time mitigations of seeding and placement of debris these areas should recover. If the desired outcomes of this project are realized these temporary disturbance areas will essentially be eliminated as the stream channel recovers.

#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

A search of the Montana Water Rights Query System shows one existing water right for stock water use directly from Prairie Dog Creek associated with this tract.

Alternative A- No Impacts Expected.

Alternative B- No Impacts Expected. Any changes or additions that may occur to the water rights associated with the construction of the small earthen structures would need approval from DNRC's Water Resources Division and the Trust Lands Management Division and any new water rights created would be required to be filed by the proponent in the name of the State Board of Land Commissioners. The proponent has indicated that they have coordinated with the Water Resources Division and no changes to any water rights are anticipated.

#### 6. AIR QUALITY:

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

Minimal impacts to air quality are expected due to the isolated location of the proposed project area and the limited amount of construction that is anticipated to occur

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

The range site on this portion of the tract is a Silty/ Overflow. The plant species composition is generally dominated by grasses which include Western Wheatgrass (*Agropyron smithii*), Green Needlegrass (*Stipa viridula*), Bluebunch Wheatgrass (*Agropyron spicatum*).

The tracts are currently utilized for livestock grazing and that use is anticipated to continue into the foreseeable future. No rare plant or cover types were noted on the tracts during previous field evaluations. A search of the Montana Natural Heritage Database shows the potential existence of one rare plant species (Wooly Twinpod) within the general area the tract and no occurrence of rare cover types listed.

Alternative A- No Impact Expected

Alternative B- Impacts to the vegetative community are anticipated during construction of the earthen structures. These impacts will be mitigated by the small size of the constructed structures, the planned revegetation of the structures and the general recovery of overall stream channel.

---

#### **8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

This parcel of state trust land is used by a variety of wildlife species, common to rangeland areas of Eastern Montana. The area provides habitat for a variety of big game species (Elk, Mule Deer, Whitetail Deer, and Antelope), predators (Coyote, Fox, Badger), upland game birds, other non-game mammals, raptors, reptiles, amphibians and various songbirds. Wildlife use on this section is not seasonal in nature.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

#### **9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

A search of the Montana Natural Heritage Program Database shows numerous occurrences of sensitive species within the general area of the proposed action.

Species of concern for this tract includes Great Blue Heron, Brewers Sparrow, Pinyon Jay, and Townsends Big Eared Bat. This tract is not located within Greater Sage Grouse General or Core Habitat.

Alternative A- No Impacts Expected

Alternative B- Due to the limited nature of the proposed project and no documented occurrence of these species on the tract no impacts are expected.

---

#### **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

Two known site leads are documented on this parcel, but neither are located within the project area.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

This tract is located in a rural area of Rosebud County and is not located on a prominent feature or in a high visibility area. Anticipated land use is not expected to change therefore there should be no change to the aesthetics in either alternative.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

IV. IMPACTS ON THE HUMAN POPULATION
-------------------------------------

- |  |
|--|
| <ul style="list-style-type: none"><li>• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i></li><li>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i></li><li>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i></li></ul> |
|--|

---

**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

This parcel is not legally accessible to the public

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

---

**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

The proposed action would be similar to an authorized improvement to the lease by the grazing lessee except that there is no monetary value that can be associated with the improvement due the nature of the project and its desired outcome. A Letter of Authorization will be the mechanism to authorize the proposed action with no compensation to the trust required.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Chris Pileski	<b>Date:</b> 09-30-2019
	<b>Title:</b> Area Manager	

---

**V. FINDING**

---

---

**25. ALTERNATIVE SELECTED:**

Alternative B

---

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The proposed stream restoration project along the state owned portion of Prairie Dog Creek would not result in nor cause significant environmental impacts. The minimal impacts phased approach and potential long term improvement to this reach of the stream should benefit the overall productivity of the parcel. Considering these factors, an environmental assessment checklist is the appropriate level of analysis for the proposed action.

---

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**☐

EIS

☐

More Detailed EA

☒

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Scott Aye
	<b>Title:</b> Lands Program Manager
<b>Signature:</b> /s/ Scott Aye 	<b>Date:</b> 10-2-2019 <del>04-25-2019</del>